

**Work Order ID 63041**

Monday, October 18, 2010 1:02:43 PM



Page 1

Item ID: D3628-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Cupped Washer

Start Date: 10/18/2010 Start Qty: 500.00



Cust Item ID:

Required Date: 10/26/2010 Req'd Qty: 500.00



Customer:

Reference:

Approvals:

Process Plan: 

Date: 10-10-10

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr

Revision Nbr

D3628

Rev B

100

0.00



PURCHASING

Purchasing

Memo

0.00

Purchasing

Issue P/O: 12776

Email or Ship DXF file to vendor

Laser Cut D3628-1 flat pattern and form as per Dwg D3628

Possible Supplier: GFI

Material release note is required

CL 10/10/20 (500)

110

0.00



Receive &amp; Inspect for Damage &amp; Mat'l Certs

Packaging

Memo

0.00

Packaging

Ensure material certification is attached

CL 10/10/10 (500)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Monday, October 18, 2010 1:02:47 PM

Page 1

Work Order ID: 63041



Parent Item: D3628-1



Parent Item Name: Cupped Washer


Start Date: 10/18/2010

Required Date: 10/26/2010

Start Qty: 500.00

Required Qty: 500.00

Comments: IPP Rev:A New Issue 07-05-28 JLM  
IPP Rev:B Removed Powder 07-07-11 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3628-1P  CUPPED WABSER		Purchased	No			110	Each	0.0000	1	500			



*[Handwritten signature]* *[Date: 10/18/10]* *[Initials]*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

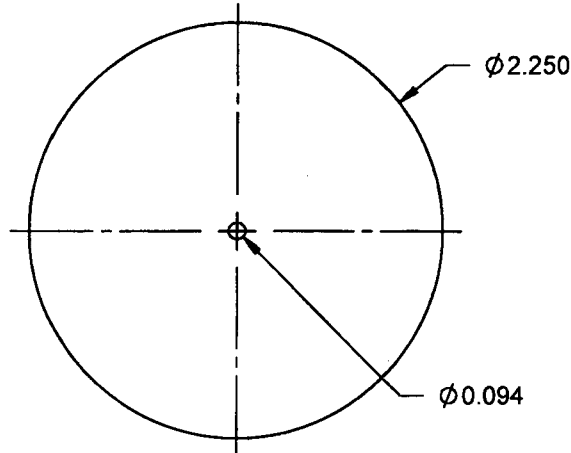
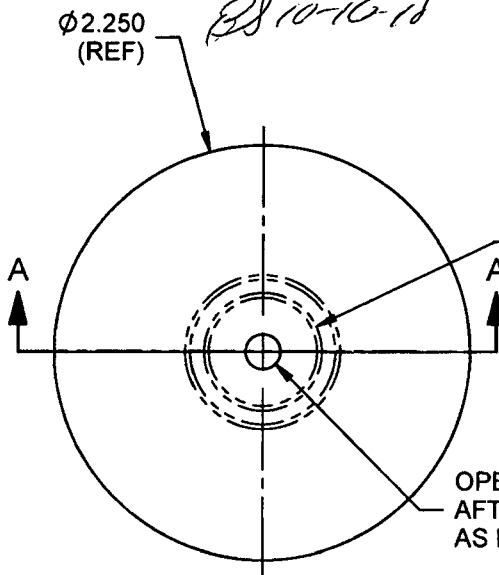
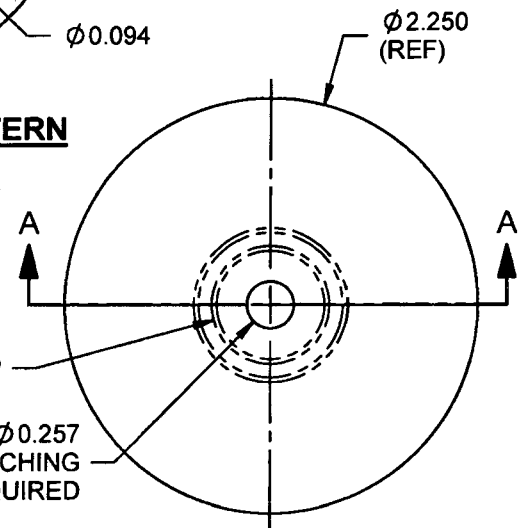
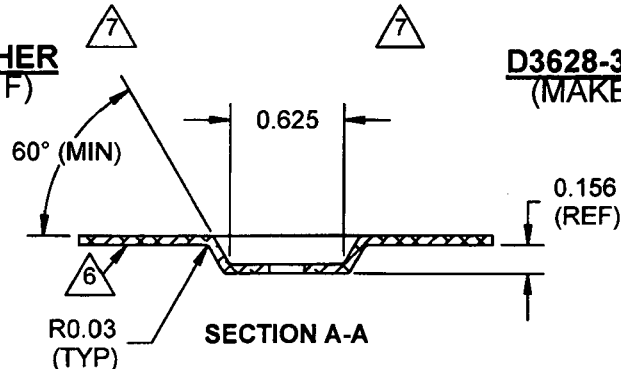
**NOTE:** Date & initial all entries

**DART**

DESIGN <b>CB</b>	DRAWN BY <b>CB</b>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <b>CE</b>	APPROVED <b>[Signature]</b>	DRAWING NO. <b>D3628</b>	REV. B SHEET 1 OF 1
DATE <b>07.07.09</b>	TITLE <b>CUPPED WASHER</b>		SCALE 1:1
REV	DATE	DESCRIPTION	
A	07.06.08	NEW ISSUE	
B	07.07.09	REMOVE POWDER COAT	

**RELEASED**

07 07 09  
R  
ENGINEER  
UNCONTROLLED COPY  
SUBJECT  
WH  
WI  
NO. **U30411**  
**ES 10-10-18**

**D3628-1F FLAT PATTERN****D3628-1 CUPPED WASHER**  
(MAKE FROM D3628-1F)PUNCH  $\phi 0.64 \times 0.16$  DEEPPUNCH  $\phi 0.64 \times 0.16$  DEEPOPEN TO  $\phi 0.191$   
AFTER PUNCHING  
AS REQUIREDOPEN TO  $\phi 0.257$   
AFTER PUNCHING  
AS REQUIRED**D3628-3 CUPPED WASHER**  
(MAKE FROM D3628-1F)**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET, 18 GAUGE (0.050 THICK) PER MIL-S-5019 (REF DART SPEC M304S18GA)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX
- 6) IDENTIFY WITH DART P/N "D3628-1/-3" USING FINE POINT PERMANENT INK MARKER ON THE UNDERSIDE OF THE PART AS INDICATED
- 7) WHEN DRILLING OUT THE CENTRE HOLE AFTER PUNCHING, ENSURE THAT THE HOLE IS DRILLED CONCENTRIC TO THE CUPPED AREA, WITHIN 0.03

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO12776

Purchase Order Date 10/20/10

PO Print Date 10/20/10

Page Number 1 of 1

Order From :

VC-GFI001

GFI  
180 AVENUE LABROSSE  
POINTE CLAIRE, QC H9R 1A1  
CA

Contact Name

Buyer

Chantal Lavoie

Vendor Phone

514 630 4877

Requisition Nbr

Vendor Fax

514 630 4849

Tax Resale Nbr

10127-2607

Vendor Account Nbr

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Ship To :

DART AEROSPACE LTD 1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**FAKED**  
CZ 10/10/10  
e-mail

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D3628-1P	CUPPED WAHSE	11/05/10 Yes	500.00 Each	Purolator ground	\$2.4160	\$1,208.00

Special Inst: AS PER DWG D3628 REV. B  
B63041

PO Total:

\$1,208.00

MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY

CERTIFICATE OF CONFORMITY  
REQ'D UPON DELIVERY

Change Nbr: 1

Change Date: 10/20/10

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable



180 AVENUE LABROSSE  
POINTE-CLAIRE, QC, CANADA H9R 1A1  
TÉL.:(514) 630-4877 - FAX:(514) 630-4849

GFI est une division de Thomas & Betts Fabrication Inc. / GFI is a division of Thomas & Betts Manufacturing Inc.



# BON DE LIVRAISON / SHIPPING MEMO

DATE DE LIVRAISON / SHIPPING DATE			N° DE BON DE LIVRAISON / SHIPPING MEMO NO	PAGE
RR	DD	MM	AN	YY
12	11	10	0449971	1/1



VENDU À / SOLD TO

EXPÉDIÉ À / SHIP TO

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON  
K6A 1K7

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON  
K6A 1K7

CODE DE CLIENT / CUSTOMER CODE	N° DE CONTRAT / JOB NO	VOTRE N° DE COMMANDE / YOUR PURCHASE ORDER NO	EXPÉDIÉ PAR / SHIP VIA
DART GFI-0299	0221999	PO12776	

QUANTITÉ / QUANTITY	N° DE PIÈCE / PART NO	DESCRIPTION
500 D36281		CUPPED WASHER

CERTIFICATE OF CONFORMANCE REQ

MFG. JOB# J0221999-001 QTY 500



EXPÉDITEUR / SHIPPER

N° DE BON DE LIVRAISON / SHIPPING MEMO NO

REÇU PAR / RECEIVED BY

DATE

TOUTES LES RÉCLAMATIONS DOIVENT ÊTRE FAITES EN DEDANS DE 5 JOURS DE LA RÉCEPTION.  
ALL CLAIMS MUST BE MADE WITHIN 5 DAYS OF RECEIPT OF GOODS.



**CERTIFICATE OF COMPLIANCE**  
**CERTIFICAT DE CONFORMITE**



Membre de / A Member of **Thomas & Betts**

180 LABROSSE AVENUE  
POINTE CLAIRE, QC  
H9R 1A1

**DART AEROSPACE LTD**  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7

CERTIFICATE NO.	<u>6</u>	OUR JOB NO	<u>J0221999</u>	SHIPPING MEMO	<u>0449971</u>	
ITEM	QUANTITY	PURCHASE ORDER	PART NUMBER	REV	NAME	DWG ISSUE
<u>500 PCS</u>	<u>PO12776</u>	<u>D36281</u>	<u>B</u>	<u>CUPPED WASHER</u>	<u>B</u>	
MATERIAL		SUPPLIED BY		MAT. REL NO.		
<u>AMS 5513 304 ANN</u>		<u>TW METALS / ALLEGHENY LUDLUM</u>		<u>H/N # 990570</u>		
PROCESS			PROCESSOR	RELEASE NOTE #		
1	<u>FIRST ARTICLE INSPECTION REPORT ON FILE</u>			<u>GFI</u>	<u>N/A</u>	
2	<u>REF. GFI MANUFACTURING JOB NUMBER J0221999-001 (500 PCS)</u>					
3						
4						
5						
6						
7						
8						
9						

WE HEREBY CERTIFY ALL THE PARTS COVERED BY THIS CERTIFICATE HAVE BEEN MANUFACTURED FROM MATERIAL SUPPLIED ON RELEASE NOTE SHOWN ABOVE AND THAT ALL PARTS HAVE BEEN INDIVIDUALLY INSPECTED AND CONFORM TO THE DRAWINGS AND PURCHASE ORDER REFERENCED ABOVE.

DATE 12 NOVEMBER 2010

G.F.I. Q.C. REP *Albert H. H. H.*



DP12-001 REV 0 Bombardier Certificate of Compliance  
TW Metals District Procedure

Revision 0

Revision Date 04-03-00

Superseding Initial

Page 1 of 1

## CERTIFICATE OF COMPLIANCE

## FRAUD AND FALSIFICATION STATEMENT

The recording of false, fictitious, or fraudulent statements or entries on this document may be punished as a felony under federal statutes including federal law Title 18 chapter 47

## CERTIFICATE OF COMPLIANCE

This certificate of compliance certifies that the material supplied on the purchase order number below complies in all respects with the material description and procurement specifications

## MERCURY FREE STATEMENT

We certify that mercury, radium, or alpha bearing instruments and / or equipment which might cause contamination have not been used in the manufacture, fabrication, assembly or testing of any material supplied by TW Metals Inc. Switches, glass thermometers, standard cell and other items containing the above elements may be used, but they will be located so as not to constitute a contamination hazard

CUSTOMER NAME

GFI

PURCHASE ORDER No.

0077443

ITEM No

0001

SHIPPER INVOICE No

03268508

MATERIAL

304 S/S Sheet

SPECIFICATION:

AMS 5513

MANUFACTURING MILL

ATI Allegheny Ludlum

SIZE

.050

HEAT / LOT No

990570

PART No

TSD5D361204A

QUANTITY:

1EA

TEST DEPARTMENT CLERK

Amy Davis

## AUTHORITY

Joe Schab

Director of Quality Assurance

This document is maintained as a Controlled Document only in the TW Metals computer system. Once printed, this document immediately becomes Uncontrolled and is subject to change at any time and without notice

NOTICE OF SHIPMENT  
PACKING LIST

## CERTIFICATE OF TEST

AL 6168-3 908

CUST. ORD. NO. & DATE 01016394	CUST. CODE 05/14/10 110977	SHIPPER NO. 462813	PRODUCT CODE 13020102060000	WILL ORDER NUMBER 30-050-144	DATE SHIPPED 07/15/10
FORMS DISTRIBUTION SOLD TO 1	VANDERGRIFT, PA. REPEAT ORDER B2037-5	GOVT CONTRACT 462813	MATL 1124 VANDERGRIFT	SHIP TO PA	INVOICE 650096
SOLD TO UNITED PERFORMANCE METALS 3475 SYMMES ROAD HAMILTON OH 45015		PRIME SEC. DSO DSO 584	UNITED PERFORMANCE METALS 3475 SYMMES ROAD HAMILTON OH 45015		

## GRADE AND SPECIFICATIONS

CARRIER - GROSS, RONALD, INC.  
ALLEGHENY STAINLESS STEEL TYPE 304-L SHEET C R COILS ANNEALED 2B FIN 3 EDGE (UPM 304L/304/302 LCS) (AMS 2248F) (AMS 5511H) (AMS 5513J) (AMS 5516P) (ASTM-A-262-10 PRA E/SCREEN PRA A) (ASTM-A-666-03) (S-400 DTD 10/10/2008) (ASTM-A-240-10) (S-1000 DATED 1/2/08) (ASME-SA-240-07) (10/22/08 EXCEPT UPM 304L/304/302) (UNS S30403) (UNS S30200) (UNS S30400) (UPM-QRS-001) (PWA 300 REV BJ) (F-14, F-17, F-22, F-23, F-MASTER) (EN 10028-7:2007-1.4301-2B) (CONTROLLED TO PWA LCS REQUIREMENTS) (EN 10028-7:2007-1.4307-2B)

ITEM	PCS	DIMENSIONS W/G/L	HEAT #	COIL #	TEST #	GROSS	TARE	NET	THEO	TAG #/	CD	SKID #
001	1	48./ .050/2053.	990570	06250N445	8772242	17270	50	17220	717111			
	1	48.02/.050/1974.	990570	06250N446	8772578	16510	50	16460	718421			
P CUST IDENTITY 00624												
2 SKIDS						33780	100	33680				

TYPE HEAT/TEST	--C--	--MN--	--P--	--S--	--SI--	--CR--	--NI--	--MO--	--CU--	--N--
HEAT 990570	.012	1.62	.030	.0002	.45	18.10	8.06	.32	.46	.07
TEST LOCATION	MI	MI	MI	MI	MI	MI	MI	MI	MI	MI
CHECK 8772242	.018	1.64	.030	.0004	.46	18.12	8.05	.32	.46	.07
TEST LOCATION	TC	TC	TC	TC	TC	TC	TC	TC	TC	TC

ITEM TEST NO	YIELD PSI *	TENSILE PSI	ELONG IN 2"	% R/A	HARDNESS	BEND	A 262	PR E	SIZE	HARDENABILITY
001 8772242	T 42500.	91500.	79.	NR	79.HRBW	T PASS	PASS	7.	NR	
TEST LOCATION	T 46000.	94500.	72.		83.HRBW					
	TC	TC	TC		TC	TC	TC	TC		
8772578	T 41900.	92500.	70.	NR	80.HRBW	T PASS	PASS	7.	NR	
TEST LOCATION	T 42800.	93000.	69.		81.HRBW					
	TC	TC	TC		TC	TC	TC	TC		

\* Y.S. BY 0.2% OFFSET METHOD

PAGE 01 - CONTINUED ON PAGE 02

REVIEWED BY G.C.

Date 7/16/10 By [Signature]

07/15/10 11:18:41

COMMENTS: Please Note-This consignment was turned over to carrier in best class condition, being correctly loaded, at which time our responsibility for loss or damage in shipment ceased. For your protection please examine shipment as it arrives. If any shortage or damage is discovered, have a full description made by transportation agent immediately before signing.

Material Safety Data Sheets for this product have been supplied to your Purchasing Department. For an additional copy phone 724-325-6577. CAUTION: Processing that releases fumes, dust, or solutions may cause lung diseases. See Material Safety Data Sheets for further information.

## NOTES

Les fiches d'information de sécurité de ce produit ont été fournies à votre département chargé des achats. Pour obtenir des exemplaires supplémentaires veuillez le téléphoner au numéro suivant 724-325-6577. Attention: les traitements entraînant la production de vapeurs, poussières, ou solutions peuvent être cause de maladies pulmonaires. Pour plus de renseignements se référer aux fiches d'information de sécurité.

The above is a true copy of data on file. The material and test results conform to the above product and specification(s) as set forth in Allegheny Technology's Order Acknowledgment.

Tracy McFarland  
Director, Corporate Quality Assurance

Customer: TW Metals  
Shipped: 09/16/2010  
HSS: 000570

Size: 36 X 120  
P.O.: 211288  
Packing: TW PO #442320800  
Scale #: 01152115  
Quantity: 27

UNITED PERFORMANCE METALS  
This is to certify that in accordance with the receipt in our files the material shipped on your purchase order conforms to the above.  
3475 Symmes Road Hamilton, OH 45015

Authorized Signature  
[Signature]  
Lynne Hoyer

**NOTICE OF SHIPMENT/  
PACKING LIST**



**CERTIFICATE OF TEST**

AL 6160-3 008

CUST. ORD. NO. & DATE 01016394		CUST. CODE 05/14/10 110977		VANDERGRIFF, PA.		SHIPPER NO. 462813		PRODUCT CODE 13020102060000		BILL ORDER NUMBER 30-050-144		DATE SHIPPED 07/15/10	
FORMS DISTRIBUTION SOLD TO 1		SHIP TO 1		SPEC 1		REPEAT ORDER 82037-5		DO RATE 26		PR. ORTY 1124		SHIP TO PA 650096	
SOLD TO UNITED PERFORMANCE METALS 3475 SYMMES ROAD HAMILTON OH 45015				PRIME SEC. DSO DSO 584				SHIP TO UNITED PERFORMANCE METALS 3475 SYMMES ROAD HAMILTON OH 45015					

**GRADE AND SPECIFICATIONS**

CARRIER - GROSS, RONALD, INC.

ALLEGHENY STAINLESS STEEL TYPE 304-L SHEET C R COILS ANNEALED 2B FIN 3 EDGE (UPM 304L/304/302 LCS) (AMS 2248F) (AMS 5511H) (AMS 5513J) (AMS 5516P) (ASTM-A-262-10 PRA B/SCREEN PRA A) (ASTM-A-666-03) (S-400 DTD 10/10/2008) (ASTM-A-240-10) (S-1000 DATED 1/2/08) (ASME-SA-240-07) (10/22/08 EXCEPT UPM 304L/304/302) (UNS S30403) (UNS S30200) (UNS S30400) (UPM-QRS-001) (PWA 300 REV BJ) (F-14, F-17, F-22, F-23, F-MASTER) (EN 10028-7:2007-1.4301-2B) (CONTROLLED TO PWA LCS REQUIREMENTS) (EN 10028-7:2007-1.4307-2B)

ITEM TEST NO	CORROSION MELT	T-YIELD	P&W E-25
001 8772242	ISO 3651-2 SOURCE	1#	TRAN BEND
	PASS 1.	49500.	2.
		53000.	
TEST LOCATION	TC	TC	TC
	CORROSION MELT	T-YIELD	P&W E-25
ITEM TEST NO	ISO 3651-2 SOURCE	1#	TRAN BEND
001 8772578	PASS 1.	48400.	2.
		49300.	
TEST LOCATION	TC	TC	TC

NR = DATA NOT REQUIRED  
METALLOGRAPHIC MAGNIFICATION: 100X ETCHANT USED: OXALIC ACID

GRADE VERIFICATION WAS CARRIED OUT SPECTROSCOPICALLY

AUSTENITIC STAINLESS STEELS ARE SOLUTION ANNEALED AT 1900 DEGREES FAHRENHEIT MINIMUM (1038 C ) AND RAPIDLY COOLED WITH AIR AND WATER TO DEVELOP THE SPECIFIED PROPERTIES. EVIDENCE OF CONFORMANCE IS PROVIDED BY THE ABILITY OF THE MATERIAL TO MEET THESE SPECIFIED MECHANICAL AND CORROSION REQUIREMENTS.

ALLEGHENY LUDLUM DOES NOT USE MERCURY IN THE TESTING OR PRODUCTION OF ITS PRODUCTS. TO THE BEST OF ALLEGHENY LUDLUMS KNOWLEDGE, UNDERSTANDING, AND BELIEF, THIS MATERIAL WAS NOT CONTAMINATED BY MERCURY WHILE IT WAS BEING PRODUCED IN OUR FACILITIES.  
PAGE 02 - CONTINUED ON PAGE 03

07/15/10 11:18:41

**CONSUMER:** Please Note - This certificate was turned over to carrier in this case condition, being correctly filled, at which time our responsibility for loss or damage in transit, ceased. For your protection please examine shipment as it arrives. If any shortage or damage is discovered, have a full description made by transportation agent on receipt before signing.

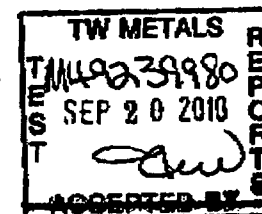
**Material Safety Data Sheets** for this product have been supplied to your Purchasing Department. For an additional copy please call 724-338-6577. **CAUTION:** Processing that making fumes, dust, or pollution may cause lung disease. See Material Safety Data Sheet for further information.

**WARNING**

Les fiches d'information en cours de ce produit ont été fournies à votre département chargé des achats. Pour obtenir des renseignements supplémentaires veuillez vous adresser au service 724-338-6577. Attention: les interventions entrainant la production de vapeurs, poussières, ou émissions peuvent être cause de maladies pulmonaires. Pour plus de renseignements voir la fiche de renseignements en cours.

This shows is a true copy of data on file. The material and test results conform to the sales contract and specification(s) as set forth in Allegheny Ludlum's Order Acknowledgement.

Tracy McFarland  
Director, Corporate Quality Assurance



Description: 304L ANN DAB, UNS AMS5513  
Drawing: TW Metals  
Shipper: TW Metals  
Date: 08/16/2010  
Heat: 650070

Qty: 36 X 120  
P.O.: 211109  
Print: TW PO 000230900  
Sales #: 01152115  
Quantity: 27

UNITED PERFORMANCE METALS  
This is to certify that in accordance with the records in our files the material shipped in your purchase order conforms to the following:  
3475 Symmes Road Hamilton, OH 45015

Authorized Signatory  
Lynne Harter

**NOTICE OF SHIPMENT/  
PACKING LIST**



**CERTIFICATE OF TEST**

AL 6168-3 908

CUST. ORD. NO. & DATE 01016394		CUST. CODE 05/14/10		ACCEPTING MILL 110977		SHIPPER NO. VANDERGRIFF, PA. 462813		PRODUCT CODE 13020102060000		MILL ORDER NUMBER 30-050-144		DATE SHIPPED 07/15/10	
FORMS DISTRIBUTION SOLD TO → 1 SHIP TO →		REPEAT ORDER 82037-5		DD RATE 26		GOVT CONTRACT		MATERIAL 1124 VANDERGRIFF		SHIPPING LOCATION PA		INVOICE 650096	
SOLD TO UNITED PERFORMANCE METALS 3475 SYMMES ROAD HAMILTON OH 45015				PRIME SEC. DSO DSO 584				SHIP TO UNITED PERFORMANCE METALS 3475 SYMMES ROAD HAMILTON OH 45015					

**GRADE AND SPECIFICATIONS**  
**CARRIER - GROSS, RONALD, INC.**  
 ALLEGHENY STAINLESS STEEL TYPE 304-L SHEET C R COILS ANNEALED 2B FIN 3 EDGE (UPM 304L/304/302 LCS) (AMS 2248P) (AMS 5511H) (AMS 5513J) (AMS 5516P) (ASTM-A-262-10 PRA E/SCREEN PRA A) (ASTM-A-666-03) (S-400 DTD 10/10/2008) (ASTM-A-240-10) (S-1000 DATED 1/2/08) (ASME-SA-240-07) (10/22/08 EXCEPT UPM 304L/304/302) (UNS S30403) (UNS S30200) (UNS S30400) (UPM-QRS-001) (PWA 300 REV BJ) (F-14, F-17, F-22, F-23, F-MASTER) (EN 10028-7:2007-1.4301-2B) (CONTROLLED TO PWA LCS REQUIREMENTS) (EN 10028-7:2007-1.4307-2B)

NO WELDS/WELD REPAIRS PERFORMED.

DIN EN 10204:2005 - 3.1 ALLEGHENY LUDLUM IS APPROVED AS A MANUFACTURER ACCORDING TO AD 2000 MERKBLATT AND THE PRESSURE EQUIPMENT DIRECTIVE PED 97/23/EC.

THE NUMERIC CODES SHOWN UNDER MELT SOURCE CAN BE INTERPRETED AS FOLLOWS:

1. - MATERIAL MELTED, ROLLED AND TESTED IN THE UNITED STATES.
2. - FOREIGN MELT; ROLLED AND TESTED IN THE UNITED STATES.

THIS DIN EN 10204:2005 - 3.1 CERTIFICATE OF TEST SHALL NOT BE REPRODUCED EXCEPT IN FULL. FEDERAL LAW PROHIBITS THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE AND MAY BE PUNISHABLE AS A FELONY UNDER FEDERAL LAW. MATERIAL WAS MANUFACTURED IN ACCORDANCE WITH THE ALC QUALITY MANUAL REVISION 19 DATED 06/09/2010. ALC HOLDS SEVERAL QUALITY CERTIFICATIONS THAT INCLUDE ISO-9001 AND AS9100. TESTING WAS PERFORMED AT ALC NADCAP AND ISO/IEC 17025 APPROVED LABORATORIES LOCATED AT THE MATRONA HEIGHTS, BRACKENRIDGE, LATROBE, AND MIDLAND, PA FACILITIES OR AT A NADCAP AND ISO/IEC 17025 ACCREDITED COMMERCIAL LABORATORY.

ATI-ALLEGHENY LUDLUM HOLDS SEVERAL QUALITY AND LABORATORY CERTIFICATIONS THAT INCLUDE ISO-9001:2000, AS9100, AD 2000-MERKBLATT NO, AND EU PRESSURE EQUIPMENT DIRECTIVE 97/23/EC, NADCAP MATERIALS TESTING, ISO/IEC 17025, GEAR S400, GEAR S-1000. REFER TO WWW.ALLEGHENYLUDLUM.COM TO ACCESS THE CURRENT ATI-AL QUALITY CERTIFICATIONS.

ALLEGHENY LUDLUM WORKS TO THE ROLLS ROYCE RR9000:SABRE REQUIREMENTS.  
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**COCKPITS-Please Note:** This equipment was turned over to carrier in best glass condition, being correctly loaded, at which time our responsibility for loss or damage in transit ended. For your protection please examine shipment as it arrives. If any shortage or damage is discovered, have a full description made by transportation agent on receipt before signing.

**WARNING**  
 Material Safety Data Sheets for this product have been supplied to you. Purchasing Department. For an additional copy please call 724-325-6577. **CAUTION:** Processing this material, fumes, dust, or solutions may cause lung disease. See Material Safety Data Sheets for further information.

**WARNING**  
 Les fiches d'information de sécurité de ce produit ont été fournies à votre département d'achat. Pour obtenir des exemplaires supplémentaires, veuillez vous adresser au service 724-325-6577. Attention: les instruments exposés à la production de vapeurs, poussières, ou solutions peuvent être cause de maladies pulmonaires. Pour plus de renseignements se référer aux fiches d'information de sécurité.

The above is a true copy of data on file. The material and test results conform to the sales contract and specification(s) as set forth in Allegheny Ludlum's order. Acknowledgment.

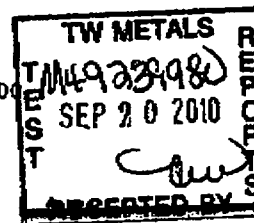
Tracy McFarland  
 Director, Corporate Quality Assurance

Description: 304L ANN. 045-052 AMS5513  
 Customer: TW Metals,  
 Shipper: 00162010  
 Weight: 950570

Box 36 X 120  
 P.O. 211280  
 P.O. TW Metals  
 Sales # 01162115  
 Quantity: 27

**UNITED PERFORMANCE METALS**  
 This is to certify that in accordance with the records in our files this material shipped on your purchase order conforms to the requirements.  
 3075 Symmes Road Hamilton, OH 45015

Authorized Signature  
 Lynne Hargis



NOTICE OF SHIPMENT/  
PACKING LIST

## CERTIFICATE OF TEST

AL 6158-3 908

CUST. ORD. NO. & DATE	CUST. CODE	ACCEPTING MLL	SHIPPER NO.	PRODUCT CODE	MLL ORDER NUMBER	DATE SHIPPED
01016394	05/14/10 110977	VANDERGRIFF, PA.	462813	13020102060000	30-050-144	07/15/10
FORMS DISTRIBUTION		REPEAT ORDER	DO RATE	GOVT CONTRACT	SHIPMENT LOCATION	INVOICE
SOLD TO → 1	82037-5	26	1124	VANDERGRIFF	PA	650096
SOLD TO		PRIME SEC.	SHIP TO			
UNITED PERFORMANCE METALS		DSO DSO	UNITED PERFORMANCE METALS			
3475 SYMMES ROAD		584	3475 SYMMES ROAD			
HAMILTON OH 45015			HAMILTON OH 45015			

## GRADE AND SPECIFICATIONS

CARRIER - GROSS, RONALD, INC.

ALLEGHENY STAINLESS STEEL TYPE 304-L SHEET C R COILS ANNEALED 2B FIN 3 EDGE (UPM 304L/304/302 LCS) (AMS 2248F) (AMS 5511H) (AMS 5513J) (AMS 5516P) (ASTM-A-262-10 PRA E/SCREEN PRA A) (ASTM-A-666-03) (S-400 DTD 10/10/2008) (ASTM-A-240-10) (S-1000 DATED 1/2/08) (ASME-SA-240-07) (10/22/08 EXCEPT UPM 304L/304/302) (UNS S30403) (UNS S30200) (UNS S30400) (UPM-QRS-001) (PWA 300 REV BJ) (F-14, F-17, F-22, F-23, F-MASTER) (EN 10028-7:2007-1.4301-2B) (CONTROLLED TO PWA LCS REQUIREMENTS) (EN 10028-7:2007-1.4307-2B)

FLAT NON-WELDED TEST PIECE WAS USED FOR ISO 3651-2 INTERGRANULAR CORROSION TEST. T1 SENSITIZATION HEAT TREATMENT WAS PERFORMED ON LOW CARBON AND STABILIZED GRADES.

QUALITY SYSTEM CERTIFIED ACCORDING TO PRESSURE EQUIPMENT DIRECTIVE 97/23/EC, ANNEX I, 4.3 BY TUV SUD, INDUSTRIE SERVICE GMBH, (NOTIFIED BODY 0036).

MATERIAL TESTED AT ALLEGHENY LUDLUM GEAE S400 (DATED 10/31/07) APPROVED FACILITIES (T1225): NATRONA HEIGHTS TECHNICAL CENTER AND BRACKENRIDGE, PA.

ALLEGHENY LUDLUM PERFORMS CHEMICAL ANALYSIS BY THE FOLLOWING TECHNIQUES:

C, S BY COMBUSTION/INFRARED  
N, O, H BY INERT FUSION/THERMAL CONDUCTIVITY  
MN, P, SI, CR, NI, MO, CU, CB, CO, V BY WDXRF  
B BY OES  
AL AND TI (>=0.10%) BY WDXRF, OTHERWISE BY OES  
PB, BI, AG BY GFAA

FINAL MECHANICAL TESTING PERFORMED BY WESTMORELAND MECHANICAL TESTING & RESEARCH, YOUNGSTOWN, PA. (T7869) GEAE S400 AND ISO/IEC 17025 APPROVED FACILITY.

TESTING WAS PERFORMED AT THE FOLLOWING LOCATIONS:

MI = ATI-ALLEGHENY LUDLUM; 950 TENTH STREET; MIDLAND, PA 15059  
TC = ATI-ALLEGHENY LUDLUM; 1300 PACIFIC AVENUE; NATRONA HEIGHTS, PA 15065

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CONSIGNEE: Please Note - This consignment is turned over to carrier in first class condition, being correctly loaded, at which time our responsibility for loss or damage in shipment ceases. For your protection please examine shipment as it arrives. If any shortage or damage is discovered, have a full description made by transportation agent on waybill before signing.

Material Safety Data Sheets for this product have been supplied to your Purchasing Department. For an additional copy please call 724-226-4577. CAUTION: Processing Certain Metals, dust, or solutions may cause lung disease. See Material Safety Data Sheets for further information.

## WARNING

Les fiches d'information - a-carte de ce produit ont été fournies a votre département chargé des achats. Pour obtenir des renseignements supplémentaires veuillez téléphoner au numéro suivant 724-226-4577. Attention: les traitements particuliers la production de vapeur, poussières, ou solutions peuvent, très souvent, être dangereux pour la santé. Pour plus de renseignements se référer aux fiches d'information - a-carte.

The above is a true copy of data on file. The product and test results conform to the sales contract and specifications as set forth in Allegheny Ludlum Order Acknowledgement.

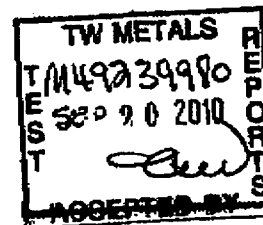
Tracy McFadden  
Director, Corporate Quality Assurance

Shardston, 304, ANN, 045-032 AMES313  
Chesapeake, TW Metals,  
Shardston, 08/10/2010  
Hart, 580570

Size: 36 X 120  
P.O. 211289  
PWA, TW CO, 08/10/2010  
Sales 6/01/08/15  
Quantity: 27

UNITED PERFORMANCE METALS  
This is to certify that in accordance with the records in our files the material shipped on your purchase order conforms to the following:  
3475 Symmes Road Hamilton, OH 45015

Authorized Signature  
Lynne Haeffler





NOTICE OF SHIPMENT/  
PACKING LIST

## CERTIFICATE OF TEST

AL 6168-3 908

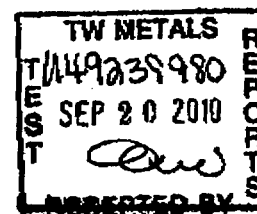
CUST. ORD. NO. & DATE		CUST. CODE		ACCEPTING MILL		SHIPPER NO.		PRODUCT CODE		MILL ORDER NUMBER		DATE SHIPPED	
01016394		05/14/10 110977		VANDERGRIFT, PA.		462813		13020102060000		30-050-144		07/15/10	
FORMS DISTRIBUTION		REPEAT ORDER		DO RATE		PIS ORSITY		MATERIAL		SHIPPING LOCATION		INVOICE	
SOLD TO 1		82037-5		26				1124 VANDERGRIFT		PA		650096	
SOLD TO				PRIME SEC.				SHIP TO					
UNITED PERFORMANCE METALS				DSO DSO				UNITED PERFORMANCE METALS					
3475 SYMMES ROAD				584				3475 SYMMES ROAD					
HAMILTON OH 45015								HAMILTON OH 45015					

## GRADE AND SPECIFICATIONS

CARRIER - GROSS, RONALD, INC.

ALLEGHENY STAINLESS STEEL TYPE 304-L SHEET C R COILS ANNEALED 2B FIN 3 EDGE (UPM 304L/304/302 LCS) (AMS 2248F) (AMS 5511H) (AMS 5513J) (AMS 5516P) (ASTM-A-262-10 PRA E/SCREEN PRA A) (ASTM-A-666-03) (S-400 DTD 10/10/2008) (ASTM-A-240-10) (S-1000 DATED 1/2/08) (ASME-SA-240-07) (10/22/08 EXCEPT UPM 304L/304/302) (UNS S30403) (UNS S30200) (UNS S30400) (UPM-QRS-001) (PWA 300 REV BJ) (F-14, F-17, F-22, F-23, F-MASTER) (EN 10028-7:2007-1.4301-2B) (CONTROLLED TO PWA LCS REQUIREMENTS) (EN 10028-7:2007-1.4307-2B)

FOR ACCESS TO ONLINE CERTIFICATES OF TEST  
REGISTER AT WWW.ALCEXTRA.COM



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**Checklist:** Please Note - This certificate was turned over to carrier to first class condition, being correctly loaded, at which time our responsibility for loss or damage to shipment ceased. For your protection please examine shipment as it arrives. If any shortage or damage is discovered, have a full description made by transportation agent, in writing, before signing.

Material Safety Data Sheets for this product have been supplied to your Purchasing Department. For an additional copy phone 724-328-8577. **CAUTION:** Processing this material alone, dust, or solutions may cause lung disease. See Material Safety Data Sheets for further information.

## WARNING

Les fiches d'information de santé de ce produit ont été fournies à votre département des achats. Pour obtenir des exemplaires supplémentaires veuillez téléphoner au service au 724-328-8577. Attention: les solutions entraînées la production de vapeurs, poussières, ou solutions peuvent, être cause de problèmes pulmonaires. Pour plus de renseignements se référer aux fiches d'information de santé.

The above is a true copy of data on file. The material and test results conform to the data printed and specified on the label in Allegheny Ludlum's Order Acknowledgment.

Tracy McFarland  
Director, Corporate Quality Assurance

Description: 304L ANN 045-052 AMS5513  
Quantity: TW Metals  
Shipper: 007000010  
Name: 000070

Size: 50 X 120  
P.O.: 211228  
Purch: TW PO 0450239980  
Shipment #: 01102115  
Quantity: 27

UNITED PERFORMANCE METALS  
This is to certify that in accordance with the records in our files the material shipped on your purchase order conforms to the following:  
3475 Symmes Road Hamilton, OH 45015

Authorized Signature  
Lynne Harpfer